

REMARKS

In the final Office Action mailed June 9, 2003, claims 1–6 and 8–18 were rejected under 35 U.S.C. § 102(b) over the *Barringer* reference. In addition, claim 7 was rejected under 35 U.S.C. § 103(a) over *Barringer* in view of the *Colby* reference.

Claims 1–18 remain pending in the application. Reconsideration and withdrawal of rejections is respectfully requested in view of the following remarks.

A. The Rejection of Claims 1–6 and 8–18 under § 102(b)

Claims 1–6 and 8–18 were rejected under 35 U.S.C. § 102(b) over *Barringer*. This rejection is respectfully traversed on the ground that the present invention uses Figures of Merit (FOMs) that are completely different than the conventional FOMs described in *Barringer*.

As noted in the specification, FOMs are an attempt to quantify performance factors in a system such as availability, reliability, and maintainability. See *Specification*, page 5, lines 22–26. One purpose of FOMs is to identify and quantify the factors that are having significant impact on a system's performance. Identifying these factors helps system developers and operators focus their efforts to improve system performance where it will have the greatest impact.

While a wide variety of FOMs are available to analyze systems, they are not equally adept at measuring different kinds of system performance. For example, popular conventional FOMs such as “Mean Time Between Failure” (MTBF), Mean Time Between Maintenance” (MTBM), and “Mean Time To Repair” (MTTR) are not ideally suited for measuring performance factors involved in a customer's perception of the availability and reliability of a system. See *Specification*, page 3, lines 18–30.

The present invention includes new kinds of FOMs that are well suited for measuring a customer's perception of the availability and reliability of a system. The factors used in the FOMs of the present invention can include the frequency of a system event, the duration of a system event, and the business impact of a system event. See *specification*, page 4, lines 2–4. Such FOMs are not found in *Barringer*.

The FOM described in *Barringer* is called the effectiveness equation and is the product of four factors called (1) availability, (2) reliability, (3) maintainability, and

(4) capability. See *Barringer*, page 2, 6th paragraph. The first three factors (availability, reliability and maintainability) are all explicitly derived from the three conventional FOMs referred to above (i.e., MTBF, MTBM and MTTR). The fourth factor (capability) is defined as the product of “efficiency multiplied by utilization” where “efficiency” is the productive work output versus work input and “utilization” is the ratio of time spent on productive efforts to the total time. See *Barringer*, page 9, 4th paragraph. None of these factors provide a direct measurement of either the frequency, duration or business impact of a system event used in calculating the *Barringer* FOM (i.e., the effectiveness equation).

In contrast, independent claim 1 of the present invention, as amended, is a method of characterizing a system that includes “measuring directly one or more additional indicia” and “calculating a Figure of Merit (FOM) based on contributions of each outage of weighted in accordance with an associated additional indicia,” where “the one or more additional indicia selected from frequency, duration and business impact of the outage.” See claim 1, lines 4–7. As noted above, the *Barringer* FOM lacks any of the directly measured additional indicia in claim 1, and therefore lacks all the limitations of the claim.

Similarly, independent claim 12, as amended, is a computer program product that includes “instructions executable to measure directly event data” and “instructions executable to calculate a Figure of Merit (FOM) including contributions for each event data element weighted in accordance with the associated business impacts.” Also independent claim 15, as amended, is a monitoring system that includes “an interface to event data that is directly measured” and “means for calculating a Figure of Merit (FOM) including contributions for the event data weighted in accordance with the associated business impacts.” Again, the *Barringer* FOM lacks directly measured event data weighed in accordance with associated business impacts and therefore lacks every limitation of these claims as well.

In the present case, the FOM described in *Barringer* lacks the associated additional indicia in claim 1 and the associated business impacts in claims 12 and 15. Claims 2–6 and 8–11, which depend from claim 1, claims 13 and 14, which depend from claim 12, and claims 16–18, which depend from claim 15, also include these limitations that are absent from *Barrigner*. Accordingly, withdrawal of the

rejection of claims 1–6 and 8–18 under 35 U.S.C. § 102(b) over *Barringer* is respectfully requested.

B. The Rejection of Claim 7 under § 103(a)

Claim 7 was rejected under 35 U.S.C. § 103(a) over *Barringer* in view of *Colby*. This rejection is traversed on the ground that neither *Barringer* nor *Colby* include Figures of Merit (FOM) according to the present invention.

As noted above, the *Barringer* FOM is derived from conventional FOMs and does not suggest direct measurement of additional indicia. Meanwhile, *Colby* provides no description whatsoever of an FOM beyond the suggestion that software improvements can allow FOMs to be calculated and displayed in real time. See *Colby*, page 3, software, 1st list. Thus, claim 7, which depends from claim 1, includes FOMs with additional indicia that are neither taught nor suggested in *Barringer* and/or *Colby*. Because neither *Barringer* nor *Colby* teaches or suggests all the limitations of claim 7, withdrawal of the rejection 35 U.S.C. § 103(a) is respectfully requested.

C Conclusion

In view of all of the above, claims 1–18 are believed to be allowable and the case in condition for allowance, which action is respectfully requested. Should the Examiner be of the opinion that a telephone conference would expedite the prosecution of this case, the Examiner is requested to contact Applicants' attorney at the telephone number listed below.

No fees are believed to be required with this Response, and should any be required, please charge Deposit Account 50-1123. Should any extension of time be required, please consider this a petition therefore and charge the required fee to Deposit Account 50-1123.

Respectfully submitted,

July 21, 2003


Eugene J. Bernard, Reg. No. 42,320
Hogan & Hartson L.L.P.
1200 17th Street, Suite 1500
Denver, Colorado 80202
(303) 454-2457 (telephone)
(303) 899-7333 (facsimile)